AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended). A modified hirudin molecule being substantially non-immunogenic or less immunogenic than non-modified wild-type hirudin ~~having essentially the same biological specificity and activity when used in vivo, comprising amino acid residues substitutions compared with the non-modified parental molecule, which cause a reduction or an elimination of one or more of T-cell epitopes acting in the parental non-modified molecule as MHC class II binding ligands and stimulating T-cells, said modified hirudin molecule has the (M)~~ and having the amino acid residue sequence of SEQ ID NO: 2:

V V Y T D C T E S G Q N **X**^{1} C **X**^{2} C E G S V **X**^{3} C G Q G N K C **X**^{4} **X**^{5} G S D G E K N Q C **X**^{6} T G E G T P **X**^{7} **X**^{8} E S H N **X**^{9} G D **X**^{10} E E I P E E Y L Q

wherein;

X^1 = T or L

X^2 = T or A or H or Q or T or L;

X^3 = A or G or H or K or N or P or Q or R or V;

X^4 = A or D or E or G or H or K or N or Q or R or S or T or I;

X^5 = A or D or E or G or H or K or N or P or Q or R or S or T or L;

X^6 = A or T or V;

X^7 = T or K;

X^8 = A or T or P;

X^9 = E or N or R or D;

X^{10} = H or F

and ~~whereby~~ wherein the wild-type sequence of hirudin (in which X^1 = L, X^2 = L, X^3 = V, X^4 = I, X^5 = L, X^6 = V, X^7 = K, X^8 = P, X^9 = D and X^{10} = F) is excluded.

Claim 2 (currently amended). [[A]] The modified hirudin molecule ~~according to~~ of claim 1, wherein

X1 = L,

X2 = L,

X3 = V,

X^4 = A or D or E or G or H or K or N or Q or R or S or T or I;

X^5 = A or D or E or G or H or K or N or P or Q or R or S or T or L;

X^6 = A or T or V;

X^7 = T or K;

X^8 = A or T or P;

X^9 = E or N or R or D; and

X^{10} = H or F.

Claim 3 (currently amended). [[A]] The modified hirudin molecule ~~according to~~ of claim 2, wherein

X^6 = V;

X^7 = K;

X^8 = P;

X^9 = D; and

X^{10} = F.

Claim 4 (currently amended). [[A]] The modified hirudin molecule ~~according to~~ of claim 3, wherein

[[X4]] X^4 = A or R, and

[[X5]] X^5 = A or H.

Claim 5 (currently amended). [[A]] The modified hirudin molecule ~~according to~~ of claim ~~4 having the sequence M1 of Table A~~ wherein X^4 = A , and X^5 = A.

Claim 6 (currently amended). [[A]] The modified hirudin molecule ~~according to~~ of claim ~~4 having the sequence M2 of Table A~~ wherein X^4 = R , and X^5 = H.

Claim 7 (currently amended). A modified hirudin molecule ~~according to claim 1~~ having [[a]] an amino acid residue sequence selected ~~form~~ from the group consisting of ~~M1 - M81 as specified in Table A~~ SEQ ID NO: 4 through SEQ ID NO: 84, inclusive.

Claim 8 (currently amended). A pharmaceutical composition comprising [[a]] the modified hirudin molecule of ~~any of the claims 1 – 7~~ claim 1, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 9 (currently amended). A peptide ~~molecule~~ having the amino acid residue sequence CILGSDGEKNQCVTGEGTPKPESHNDGDFE ~~(A)~~ (SEQ ID NO: 1) or a sequence ~~track~~ consisting of at least 9 consecutive amino acid residues of ~~any of said peptide molecules~~ SEQ ID NO: 1 having a potential MHC class II binding activity ~~and created from the primary sequence of non-modified hirudin~~, ~~whereby~~ wherein said peptide ~~molecule or sequence track~~ has a stimulation index of > 1.8 in a biological assay of cellular proliferation and said index is taken as the value of cellular proliferation scored following stimulation by [[a]] the peptide and divided by the value of cellular proliferation scored in control cells not in receipt of the peptide.

Claim 10 (cancelled).

Claim 11 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 2, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 12 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 3, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 13 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 4, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 14 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 5, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 15 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 6, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.

Claim 16 (new). A pharmaceutical composition comprising the modified hirudin molecule of claim 7, optionally together with a pharmaceutically acceptable carrier, diluent or excipient.